

Agriculture Workgroup (AgWG)

March 21st, 2019

10:00 AM – 3:00 PM

AgWG Face-to-Face Meeting Minutes

Summary of Actions and Decisions:

Decision: Approval of meeting minutes from the Feb 21, 2019 Conference Call.

Decision: The AgWG endorsed the selected at-large governance membership for the 2019-2020 term.

Action: The AgWG accepts the request from DE for further time to provide feedback on the Cropland Irrigation Expert Panel Report by the April 18th AgWG Conference Call. The Expert Panel will ask for approval of the recommendation report on April 18th with additional feedback considered.

Action: The AgWG will form a small group to address BMP tracking, reporting, and verification challenges. Please email Allie Wagner (wagner.alexandra@epa.gov) if you would like to be a part of or spearhead this group by COB Friday, April 5th.

Action: Jurisdictions will prepare a brief update on technical assistance from each state in preparation for discussion on the Agricultural Technical Directive at the April 18th conference call.

Welcome, introductions, roll-call, review meeting minutes

Workgroup Chairs

- Roll-call of the governance body
- Roll-call of the meeting participants
- **Decision:** Approval of meeting minutes from the Feb 21, 2019 Conference Call.

Workgroup Areas of Focus

Accounting & Reporting • Implementation • Innovation

Data & Modeling • CBP Assignments

At-large Election Results (5 min)

Workgroup Chairs

Nominations to serve 2-year terms as an at-large member on the AgWG were due to Allie Wagner and Loretta Collins by February 22nd, 2019. Results of the signatory members' selection process were announced, and the new at-large members was confirmed.

Decision: The AgWG endorsed the selected at-large governance membership for the 2019-2020 term.

- Kristen Saacke-Blunk motioned to endorse and Chris Brosch seconded.

Innovation

BMP Expert Panel Update (5 min)

R. Bryant

Ray Bryant, ARS, updated the AgWG on the expected timeline for Agricultural Ditch Management Expert Panel recommendations report to be released for partnership review.

- Ray Bryant noted that the government shutdown slowed the process down, but there is a draft report with consensus from the panel. This will be released to the Partnership by June and there will be a webinar presenting the findings in July.
- Barry Frantz: For N and P, do you have a crosswalk with NRCS practices?
 - Ray Bryant: We looked at existing conservation practices and started there.
 - Barry Frantz: I'll follow up with you offline.
- Paul Bredwell: Years ago, there was a project in Minnesota that looked at nutrient runoff from a city where the farmer put a curtain in place. Would that project help you with getting an efficiency for the curtains?
 - Ray Bryant: We should capture that project and see if that research will move us forward on an efficiency. Our issue is not knowing how fast ground water moves laterally to get a load. If that information was available from the study, that may be helpful if we could translate to conditions here.
 - Paul Bredwell: I'll send that information to you.
- Jason Keppler noted that we have several interim practices including denitrifying bioreactors, saturated buffers and P sorbing currently for planning purposes only. BMPs coming out of this panel won't be available until the next milestone period.

Implementation

NFWF 2019 Request for Proposals (45 min)

Jake Reilly

Jake Reilly, NFWF, announced the 2019 National Fish and Wildlife Foundation's [Chesapeake Bay Stewardship Fund](#) request for proposals and discussed current program priorities.

- Jake Reilly: The RFPs are available online through the link above. Agricultural conservation and water quality in the agricultural sector are huge focuses of these programs.
 - Innovative Nutrient and Sediment Reduction Grant: This focuses on accelerating implementation in innovative ways up to 1 million dollars. We have a focus on partnerships and collaboration that have a regional scale for programs and projects.
 - Small Watershed Grant: This focuses on delivering technical skillsets to support smaller grants. For example, help a conservation district leverage assistance to get projects completed.
 - We want to make sure everyone is aware of these opportunities. Specific projects we're looking for include soil health implementation, better models for technical assistance delivery, and building partnerships with industry including traditional products, consumer groups, ag lending, and risk management. We will strategically leverage the AgWG for reviewing grants, working with Loretta to figure that out in April or May. We may co-host the AgWG June meeting.
- Marel King: In the past did your grants prioritize RCPP work?
 - Jake Reilly: As much as possible, we try to prioritize this with EPA funding. We have gone in and built up RCPP projects. We also have people getting funding from us and using that to build RCPP.
- Kelly Shenk: With the state revolving loan plan, a focus in our region is putting funding into agriculture now that wastewater funding is complete. They have figured out how to sequence loans and NFWF funding. I'd love to brainstorm on how this piece fits into the puzzle and how to

leverage all these different pots of money. Would a discussion giving real examples of how people have done this be helpful?

- Kristen Saacke-Blunk: The sequencing at the right time discussion is important. These other funds require matching funds to be in place already with the application.
- Jason Keppler: A challenge in MD is quantifying increased soil health. Is the indicator of healthy soil organic matter or are there other things we need to consider?
- Kelly Shenk: I like the idea of a soil health meeting with farmers to dig deep and others involved with it. Perhaps a STAC workshop or expert panel.
 - Kristen Saacke-Blunk: This could be a focus at the meeting in June.

Innovation

Cropland Irrigation Expert Panel Report (30 min)

Tim Sexton

The Cropland Irrigation Expert Panel recommendations report was released for CBP partnership review on January 16th, 2019. On February 26th, a public meeting/webinar was held in Georgetown, DE. A recording of the webinar and associated materials can be found [here](#). All feedback on the Cropland Irrigation BMP Expert Panel Report was requested by March 12th. Tim Sexton, VA DCR and panel Chair, presented the recommendation report to the AgWG for approval.

- Ken Staver: With the potential negative efficiency you mentioned, should irrigated and non-irrigated be classified as different land uses?
 - Tim Sexton: According to the research there is more N loss on irrigated than non-irrigated land. And there needs to be a great deal more research.
 - Jeremy Hanson noted that the panel didn't go down this road since further research is necessary.
- Frank Coale: Perhaps a new land use could be used in Phase 7 or Phase 8, but the take home message from the panel was there is not a consistent efficiency.
 - Jason Keppler: Were those losses measured during the growing season?
 - Tim Sexton: They were measured continuously for 5 years and looking at cover crop season as well. During this time there was extreme drought. There were only three research papers in the watershed, there's just not enough research.
- Jason Keppler: We have an approved interim BMP efficiency, but an inconclusive efficiency result from BMP expert panel.
 - Frank Coale: From a research point of view, it's just that the data is too variable.
- Chris Brosch: My suggestion is to thank the panel for their work and DE has no opposition about more research being needed. What it came down to was there was no data capture or data difference captured. The University of Delaware is interested in pursuing this research. We can sunset the panel and revisit it when there is more conclusive research.
 - Jeremy Hanson: By signing off on the panel report, that's exactly what we're saying. We always have the option to revisit expert panels when new research emerges as explained in the governance protocols.
- Frank Coale: What happens to the interim BMP once this is approved?
 - Jeremy Hanson: The interim BMP will be removed once this is approved.
 - Tim Sexton: It will just be eliminated as a planning BMP; the interim BMP means nothing because it does not give credit for progress.
- Jeremy Hanson: There are essentially two separate decisional requests. One is approving the panel report and agreeing with the conclusion that more research is necessary. The second is what to do with the interim practice moving forward.

- Tim Sexton: My recommendation is to accept the report and let it move forward in the process.
- Kristen Saacke Blunk: I move to accept the report, thank the panel, and recognize the desire to pursue further research on all crops and irrigation.
 - The motion was seconded.
- Chris Brosch: We are dissenting from Delaware. We are not ready to close the book. This expert panel did not take into consideration fruit and vegetable crops at all. We agree that we'd like to thank the panel, but don't want to close the book on this.
 - Adam Lyon: MD is inclined to agree with Delaware.
- Frank Coale: The recommendations listed on the slide are what is being approved. Nowhere up there does it say it won't be opened again with more research. The report is well done, and nowhere does it say the book is closed. It leaves it open for many further questions.
 - Jeremy Hanson: We specifically say we do not have enough research at this time, and we recommend more research. We don't have the information available on both sides. I understand where Delaware is coming from, but I feel as though accepting the report accomplishes the same goal you would like- more research.
- Mark Dubin: If the jurisdictions in the governance body are not agreeing to consensus, then this will move up the chain to WQGIT, then Management Board to make the decision to approve.
 - Frank Coale: I don't understand how not approving this here at the AgWG leads to a different path in the end if it will just move up to the next level for a decision.
 - Paul Bredwell: The last bullet point leaves this open to further research.
 - Frank Coale: I would love to accept this report to say we have this approved report showing that the Partnership wants more research on the subject.
 - Chris Brosch: It is laser focused on corn production.
 - Loretta Collins: The reason for that is because there is only corn research currently available.
- Ken Staver: The lack of information spans broader than only specialty crops.
- Tim Sexton: There is research on corn because it is financed by seed companies. We don't have the funding for tomatoes or potatoes.
 - Mark Dubin: In the recommendations, I don't see where it limits further research to corn. The panel leaves the door wide open for research on anything such as soybeans or specialty crops. It says we need more research on everything as a whole.
 - Frank Coale: If we have an approved report from a group of experts that says we need more research, it will be referenced in research proposals.
- Tim Sexton: Is the contention from DE with the report itself, or that you disagree with additional research is needed?
 - Chris Brosch: I think the report closes the door in a modeling context. If we approve the report, we approve the research. The corn research was done in extreme drought and wet years, but it does not address the average year.
 - Jeremy Hanson: All expert panels are asked to address current research available. This research says that there is a risk for more end leaching if too much water goes on. I'm interpreting the language in the report differently than you. If there is specific language that we could edit, I would need specific language from DE.
 - Tim Sexton: If you don't accept the panel report, we should do away with these panels and develop political panels if you don't like the end result of scientific research.
- Marel King: It does say that long term study to get a better sense of average conditions would be helpful and mentions a lot of additional research at the end of the report.

- Jeremy Hanson: I don't see what Chris is saying as the same as what the report is saying. If there is specific language that can be massaged without changing the end recommendation, it is welcomed.
- Loretta Collins: Did you submit this feedback during the review period?
 - Chris Brosch: No, we did not have time to provide feedback.
 - Paul Bredwell: Can we allow more time for feedback?
- Kristen Saacke-Blunk: I can withdraw my motion and go with giving more time to DE to provide feedback and come back to this later.
 - Jeremy Hanson: Since this only came up today, we can note the lack of consensus, provide specific edits, and move this forward to the WQGIT.
 - Jason Kepler: This is not a time crunch situation, it's long term in nature. If we agree that others want more time to review the report and provide feedback, we should extend the feedback period.
 - Jeremy Hanson: We were working very hard to have this out and commented on before draft WIPs are done. I personally want this to be off my plate, so I can move on with other things.
- **Action:** The AgWG accepts the request from DE for further time to provide feedback on the Cropland Irrigation Expert Panel Report by the April 18th AgWG Conference Call. The Expert Panel will ask for approval of the recommendation report on April 18th with additional feedback considered.

CBP Assignments

Moving Forward: Ag TA and Conservation Practice Implementation (30 min)

All

A discussion regarding next steps in regards to the Oct 18th, 2018 charge to the AgWG from the CBP Management Board regarding the CBP Executive Council's [Directive in Support of Agricultural Technical Assistance and Conservation Practice Implementation](#). This serves as a follow-up to the AgWG November 2018 action item:

ACTION (NOV 2018): The AgWG is asked to review the [CBP Management Board's Discussion Draft](#) regarding the [CEC Agricultural Technical Assistance Directive](#) document to allow for a constructive conversation in January 2019.

- This agenda item was skipped due to time constraints and will be revisited at our next meeting.
- **Action:** Jurisdictions will prepare a brief update on technical assistance from each state in preparation for discussion on the Agricultural Technical Directive at the April 18th conference call.

Accounting & Reporting

Assessing Cover Crop Performance with Satellite Imagery (30 min)

D. Hively & J. Peredo

Dean Hively, USGS, and Julio Peredo, NASA, discussed an [imagery analysis tool](#) designed by the NASA DEVELOP program that supports operational analysis of winter cover crop performance for the greater than 25,000 fields annually enrolled in the Maryland cover crop cost share program.

- Tim Sexton: It's difficult for VA to look at voluntary practices, whether cover is for production or cover crop.
 - Dean Hively: If you look at a time series to June, you can tell terminated vs harvested.

- Tim Sexton: I'm interested from the standpoint of projected burndown times.
- Jason Keppler: We're interested in voluntary cover crops, and this will certainly give us the ability to do that. For other jurisdictions, you can make assumptions looking in the past.
 - Kelly Shenk: How do you use it for tracking voluntary cover crop implementation?
 - Jason Keppler: Right now, it's only enrollment. We are hoping to expand to voluntary cover crop and time series of killing down to make assumptions from that. A challenge is the time necessary to spot check.
 - Chris Brosch: From a DE perspective we have a successful roadside transect survey. It could be interesting to trace the late burn down even further.
- Jill Whitcomb: What was the total cost of the project? What is the main benefit?
 - Jason Keppler: The initial cost was paid for through a NFWF INSR grant and Small Watershed grant of about \$700,000 followed by \$300,000 from additional sources for the analysis. I would estimate for the tool, probably about a million with a lot of NASA contribution that hasn't been quantified. The main benefit is more efficiency with an online management tool to enroll and pay farmers through cover crop programs.
- Julio Peredo noted that all the code is available on GitHub, so others wouldn't be starting from scratch with a similar analysis.

BMP Data: Tracking, Reporting, and Verification Challenges (60min)

Matt Monroe

Matt Monroe, Vice-Chair, led a discussion on challenges facing jurisdictions related to BMP data tracking, reporting, and verification and possible ways to address those challenges.

- The group had a lively discussion with the following important points:
 - New 1619 agreements are a non-starter.
 - Some practices are still functioning properly after the lifespan has ended.
 - It would be ideal to have one MOU instead of 6 individual agreements to track.
 - Farmers don't like having farm visits or farm flyovers.
 - VA perspective: We inspect practices at a midlife point and the year before it would come out of lifespan. We have staff and funding for the soil and water conservation districts do the inspection.
 - There is an issue that when a state agency doesn't put in the structure, you don't know where they are located.
 - PA perspective: Funding is needed regardless of what method we use. We should use money to put into implementation, but instead we're chasing ghosts. In PA, we have multiple methodologies one of which is verifying practices while on the farm for other things.
 - Annual practices such as nutrient management it is difficult to find common definitions for nutrient management. For WV with 90,000 acres under voluntary nutrient management plans, it may not be worth it to verify nutrient management if it barely moves the needle.
- Jason Keppler: The fundamental issue is relying on federal partners for federal practices, but the states are held accountable with their hands tied. If states don't have the capacity to verify practices, is there an opportunity for federal agencies to pick up that verification responsibility on behalf of the states?

- Jill Whitcomb: There is also a compounding factor of lifespans if we have some go out of lifespan on year 10 and there's 20 new ones, over time there will be more to inspect. It won't level out if a lot go over the credit life, you'll have more to verify.
- Kelly Shenk: I like the adaptive management approach. If we built a database 1,2,3 years after states are doing this and see that 70% are maintained, we can make some assumptions from that. I think that's reasonable once we get the data.
 - Jason Keppler: But if there's no way of finding those projects, there's no way to build up that database.
- Paul: In the past there was an MOU with EPA where they would visit every contracted poultry farm to survey for BMPs and conservation practices. That MOU fell apart, but do we have enough associations out there to develop MOUs with only 10% to help go verify.
 - Kelly Shenk: It's a precedent that EPA agreed to have flock supervisors go out and follow an agreed upon checklist for verification.
- Chris Brosch: If we have the verification committee meeting again and they can throw their weight behind that, I endorse the verification meeting again.
- Bill Angstadt: I'm concerned about public messaging with nutrient management. We worked hard for many years to get these plans on the books and now we can't verify them. Maybe we should focus on securing and verifying several key metrics to better indicate agriculture.
 - Dean Hively: Farmers can release data individually. At conservation districts, they could have a paper asking if they would allow data sharing for verification?
- Kristen Saacke-Blunk: It's a potential optics issue of whether or not we have gone far enough with the current verification process to see if it works or not.
- **Action:** The AgWG will form a small group to address BMP tracking, reporting, and verification challenges. Please email Allie Wagner if you would like to be a part of or spearhead this group by COB Friday, April 5th.
 - It would be helpful to have an entire AgWG led group, not just jurisdictions although this issue does boil down to the states. Analysis should be done prior to the meeting to see how CBP can help characterize the issue quantitatively, the severity of the problem, and how we can change it.

Schedule for Bay Program Accounting System: Progress, Milestones and WIP III (30 min)

Jeff Sweeney, EPA CBPO, discussed the schedules for submitting data and information for future Progress assessments, Milestones, and WIP III.

- Kelly Shenk: How long does it take to get that data massaged and ready for the Chesapeake Bay Watershed Model? I think it used to take a couple months.
 - Jeff Sweeney: We've gotten better with the time with the new model, we hope to do that in a few weeks. But it will take time to come back to the workgroups and show the data going into the model.
- Chris Brosch: The massaging of the data is a defiling procedure and reconciliation with the land use right? It's an automated procedure.
 - Jeff Sweeney: Yes, we use methods developed over the years and just plug in the updated data.
 - Chris Brosch: When that procedure is completed, and you bring the results back to the workgroups, that may be different from what the Ag Modeling Subcommittee agreed to.

- Jeff Sweeney: Bringing it to the workgroups is the time to see how accurate our projections were and potentially make changes to the methodology to make our projections better.
- Jason Keppler: Slide 8, the second bullet regarding animal populations: are jurisdictions limited in terms of species that animal numbers can be reported?
 - Jeff Sweeney: These are the animal types where there is an annual census. We take a statewide number and redistribute it out to the counties
 - Mark Dubin: It depends on what NASS reports for each state. If it's a significant population, they'll do an annual report. If not, it will be the 5-year Ag Census data.
 - Jason Keppler: If jurisdictions have dependable numbers they can report, will the Bay Program consider that outside of the Ag Census?
 - Mark Dubin: No, that data comes from those sources, not from other sources.
- Jason Keppler: We downloaded the source data from CAST and showed all the animal types associated with each county and we've discovered some major issues with how the defiling procedure accounts for different things. We found one county with 2007 Ag Census showed 7,000 broilers and 2012 Ag Census showed 335,000 broilers. Are there limits on the defiling procedure so we don't see that level of increase?
 - Jeff Sweeney: The methods the Ag Modeling Subcommittee made were hopefully trying to minimize what you are explaining. We can look into the method and see how we can work to fix that. Another difficult thing is we have county data that we don't know if operations are in or out of the Bay Watershed.
- Jason Keppler: With the Ag Drainage Management Panel Report, if everything aligns and a report is approved in the Fall, is there an opportunity within the schedule to build the recommendations into the 20-21 milestone [period]?
 - Jeff: The deadline is April, but if you state your case a lot of the time things can happen, depending on how much you have to report. If you want to put it in now and the past 20 years, that's when it effects calibration.
 - Mark Dubin: We have some new interim BMPs in the model now for planning that will come out in this report. Some of these will already be in the system used for WIP planning and NEIEN so it's just a matter of turning them on.
 - Jeff Sweeney: Simple efficiencies are easy, if it's complex that's another story.
 - Jason Keppler: Hopefully we can drive them into the 2021 milestone period then.

New Business & Announcements

- New VA Signatory Representation: Seth Mullins
- Announcement: [Faculty Assistant Position Non-Point Source Analyst](#) (UMD)
- June Face-to-Face in Rockingham County VA.

Next meeting: Thursday, May 16th, 10AM to 12 PM, Conference Call

Meeting Participants:

Jason Keppler	MDA
Matt Monroe	WV DA
Loretta Collins	UMD
Allie Wagner	CRC
Chris Brosch	DDA
Clint Gill	DDA
Adam Lyon	MDA
Greg Albrecht	NYS Dept. of Ag & Markets
Jill Whitcomb	PA DEP
Cindy Shreve	WV DA
Jerry Ours	WV DA
Tim Sexton	VA DCR
Marel King	CBC
Kelly Shenk	EPA
Jeff Hill	LCCD
Kristen Saacke-Blunk	Headwaters, LLC
Dave Graybill	PA Farm Bureau
Barry Frantz	USDA
Paul Bredwell	U.S Poultry and Egg
Peter Hughes	Red Barn Consulting
Emily Dekar	USC
Dr. Gurpal Toor	UMD
Frank Coale	UMD
Elizabeth Hoffman	MDA
Ken Staver	UMD
Elliott Kellner	WVU
Jeremy Hanson	VT
Mark Dubin	UMD
Jim Cropper	Northeast Pasture Consort.
Ron Ohrel	Mid-Atlantic Dairy Assoc.
Alana Hartman	WV DEP
Jake Reilly	NFWF
Ray Bryant	USDA ARS
Katie Turner	The Nature Conservancy
Bill Angstadt	DE/MD Agribusiness Assoc.